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SEQUENCE LISTING

<110> Nordlund, Henri Rainer et al.

<120> Avidin mutants

<130> BP110588

<160> 29

<170> PatentIn version 3.1

<210> 1

<211> 152

<212> PRT

<213> Gallus gallus

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Ala Leu Val Ala Pro Gly Leu Ser Ala Arg Lys Cys Ser Leu Thr Gly
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Lys Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn
 35 40 45

Ser Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr
 50 55 60

Ser Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile
 65 70 75 80

Asn Lys Arg Thr Gln Pro Thr Phe Gly Phe Thr Val Asn Trp Lys Phe
 85 90 95

Ser Glu Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn
 100 105 110

Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn
 115 120 125

Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe
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Thr Arg Leu Arg Thr Gln Lys Glu
 145 150

<210> 2

<211> 298

<212> PRT

<213> Gallus gallus

<400> 2

Met Val His Ala Thr Ser Pro Leu Leu Leu Leu Leu Leu Ser Leu
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 20 25 30

Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe
 35 40 45

Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr
 50 55 60

Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys
 65 70 75 80

Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys
 85 90 95

Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys
 100 105 110

Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser
 115 120 125

Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser
 130 135 140

Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn
 145 150 155 160

Lys Ser Gly Gly Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp
 165 170 175

Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser
 180 185 190

Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn
 195 200 205

Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser
 210 215 220

Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser
 225 230 235 240

Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr
 245 250 255

Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser Pro
 260 265 270

Leu His Gly Thr Gln Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr Phe
 275 280 285

Gly Phe Thr Val Asn Trp Lys Phe Ser Glu
 290 295

<210> 3
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 <213> Artificial sequence
 <223> linker

<400> 3

Gly Gly Ser Gly Gly Ser
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<210> 4
 <211> 31
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 <213> Artificial sequence
 <223> primer

<400> 4
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31

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 <213> Artificial sequence
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19

<210> 6
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<400> 6
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<210> 7
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 <223> primer

<400> 7
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<210> 8
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 <212> DNA
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 <212> DNA
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<400> 9
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<400> 11
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<210> 12
 <211> 38
 <212> DNA
 <213> Artificial sequence
 <223> primer

<400> 12
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<210> 13
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 <212> DNA
 <213> Artificial sequence
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<400> 13
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<400> 15
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<400> 16
 cacaggcacc cacatcacag ccg

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<210> 17
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<400> 17
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<400> 18
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<210> 19

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<400> 19
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<210> 20
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 <223> primer

<400> 20
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<400> 22
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<400> 23
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<210> 24
 <211> 581
 <212> PRT
 <213> Gallus gallus

<400> 24

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Phe	Gly	Phe	Thr	Val	Asn	Trp	Lys	Phe	Ser	Glu	Ser	Thr	Thr	Val	Phe
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Thr	Gly	Gln	Cys	Phe	Ile	Asp	Arg	Asn	Gly	Lys	Glu	Val	Leu	Lys	Thr
	50					55					60				
Met	Trp	Leu	Leu	Arg	Ser	Ser	Val	Asn	Asp	Ile	Gly	Asp	Asp	Trp	Lys
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Ala	Thr	Arg	Val	Gly	Ile	Asn	Ile	Phe	Thr	Arg	Leu	Arg	Thr	Gln	Lys
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Glu	Gly	Gly	Ser	Gly	Gly	Ser	Ala	Arg	Lys	Cys	Ser	Leu	Thr	Gly	Lys
			100					105						110	
Trp	Thr	Asn	Asp	Leu	Gly	Ser	Asn	Met	Thr	Ile	Gly	Ala	Val	Asn	Ser
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Arg	Gly	Glu	Phe	Thr	Gly	Thr	Tyr	Ile	Thr	Ala	Val	Thr	Ala	Thr	Ser
	130					135					140				
Asn	Glu	Ile	Lys	Glu	Ser	Pro	Leu	His	Gly	Thr	Gln	Asn	Thr	Ile	Asn
	145					150					155				160
Lys	Ser	Gly	Gly	Ser	Thr	Thr	Val	Phe	Thr	Gly	Gln	Cys	Phe	Ile	Asp
				165					170					175	
Arg	Asn	Gly	Lys	Glu	Val	Leu	Lys	Thr	Met	Trp	Leu	Leu	Arg	Ser	Ser
			180					185					190		
Val	Asn	Asp	Ile	Gly	Asp	Asp	Trp	Lys	Ala	Thr	Arg	Val	Gly	Ile	Asn
		195					200					205			
Ile	Phe	Thr	Arg	Leu	Arg	Thr	Gln	Lys	Glu	Gly	Gly	Ser	Gly	Gly	Ser
	210					215					220				
Ala	Arg	Lys	Cys	Ser	Leu	Thr	Gly	Lys	Trp	Thr	Asn	Asp	Leu	Gly	Ser
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Asn	Met	Thr	Ile	Gly	Ala	Val	Asn	Ser	Arg	Gly	Glu	Phe	Thr	Gly	Thr
				245					250					255	
Tyr	Ile	Thr	Ala	Val	Thr	Ala	Thr	Ser	Asn	Glu	Ile	Lys	Glu	Ser	Pro
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Leu His Gly Thr Gln Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr Phe
 275 280 285
 Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Gly Gly Ser Gly Ser Gly
 290 295 300
 Ser Gly Ser Gly Ser Gly Arg Thr Gln Pro Thr Phe Gly Phe Thr Val
 305 310 315 320
 Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe Thr Gly Gln Cys Phe
 325 330 335
 Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg
 340 345 350
 Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly
 355 360 365
 Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly
 370 375 380
 Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu
 385 390 395 400
 Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr
 405 410 415
 Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu
 420 425 430
 Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys Ser Gly Gly Ser
 435 440 445
 Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu
 450 455 460
 Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly
 465 470 475 480
 Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg Leu
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 Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys Ser
 500 505 510

Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly
 515 520 525

Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val
 530 535 540

Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln
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 565 570 575

Trp Lys Phe Ser Glu
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 <212> DNA
 <213> Gallus gallus
 <221> DNA
 <223> DNA sequence which codes for scAvd of SEQ ID NO 24

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 ttttcagagt ccaccactgt cttcacgggc cagtgttca tagacaggaa tgggaaggag 180
 gtcctgaaga ccatgtggct gctgcgggtca agtggttaatg acattggtga tgactggaaa 240
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 ggaggctccg ccagaaagtg ctgctgact gggaaatgga ccaacgatct gggctccaac 360
 atgaccatcg gggctgtgaa cagcagaggt gaattcacag gcacctacat cacagccgta 420
 acagccacat caaatgagat caaagagtca ccaactgcatg ggacacaaaa caccatcaac 480
 aagtccggcg gatccaccac tgtcttcacg ggccagtgtc tcatagacag gaatgggaag 540
 gaggtcctga agaccatgtg gctgctgcgg tcaagtgtta atgacattgg tgatgactgg 600
 aaagctacca gggtcggcat caacatcttc actcgctcgc gcacacagaa ggagggaggc 660
 tccggaggct ccgccagaaa gtgctcgctg actgggaaat ggaccaacga tctgggctcc 720
 aacatgacca tcggggctgt gaacagcaga ggtgaattca caggcaccta catcacagcc 780
 gtaacagcca catcaaatga gatcaaagag tcaccactgc atgggacaca aaacaccatc 840
 aacaagagga cccagcccac ctttggtctc accgtcaatt ggaagtcttc agagggagggt 900
 tccggatcgg gatccggctc tggcagcggc aggaccacgc ccacctttgg cttcaccgtc 960

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acagccgtaa cagccacatc aaatgagatc aaagagtcac cactgcatgg gacacaaaac 1320
accatcaaca agtccggcgg atccaccact gtcttcacgg gccagtgtt catagacagg 1380
aatgggaagg aggtcctgaa gaccatgtgg ctgctgcggt caagtgttaa tgacattggt 1440
gatgactgga aagctaccag ggtcggcatc aacatcttca ctgcctgcg cacacagaag 1500
gagggaggct ccggaggctc cgccagaaag tgctcgtga ctgggaaatg gaccaacgat 1560
ctgggctcca acatgaccat cggggctgtg aacagcagag gtgaattcac aggcacctac 1620
atcacagccg taacagccac atcaaatgag atcaaagagt caccactgca tgggacacaa 1680
aacaccatca acaagaggac ccagcccacc tttggcttca ccgtcaattg gaagttttca 1740
gagtga 1746

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<210> 26
<211> 897
<212> DNA
<213> Gallus gallus
<221> DNA
<223> DNA sequence which codes for dcAvd of SEQ ID 2

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ttttcagagt ccaccactgt cttcacgggc cagtgttca tagacaggaa tgggaaggag 180
gtcctgaaga ccatgtggct gctgcgggtc agtggttaatg acattggtga tgactggaaa 240
gctaccaggg tcggcatcaa catcttcact cgcctgcgca cacagaagga gggaggctcc 300
ggaggctccg ccagaaagtg ctgcgtgact gggaaatgga ccaacgatct gggctccaac 360
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acagccacat caaatgagat caaagagtca ccactgcatg ggacacaaaa caccatcaac 480
aagtccggcg gatccaccac tgtcttcacg ggccagtgtc tcatagacag gaatgggaag 540
gaggtcctga agaccatgtg gctgctgcgg tcaagtgtta atgacattgg tgatgactgg 600
aaagctacca gggtcggcat caacatcttc actgcctgc gcacacagaa ggaggagggc 660

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tccggaggct ccgccagaaa gtgctcgctg actgggaaat ggaccaacga tctgggctcc 720
 aacatgacca tcggggctgt gaacagcaga ggtgaattca caggcaccta catcacagcc 780
 gtaacagcca catcaaata gatcaaagag tcaccactgc atgggacaca aaacaccatc 840
 aacaagagga cccagcccac ctttggcttc accgtcaatt ggaagttttc agagtga 897

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 <223> primer cp34_C1

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<210> 28
 <211> 290
 <212> PRT
 <213> Gallus gallus

<400> 28

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 35 40 45

Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu
 50 55 60

Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg
 65 70 75 80

Val Gly Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly
 85 90 95

Ser Gly Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn
 100 105 110

Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu
 115 120 125

Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile

130	135	140
Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys Ser Gly 145 150 155 160		
Gly Ser Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys 165 170 175		
Arg Thr Gln Pro Thr Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu 180 185 190		
Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys 195 200 205		
Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile 210 215 220		
Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg 225 230 235 240		
Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys 245 250 255		
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 <213> Gallus gallus

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tccaccactg tcttcacggg ccagtgcctc atagacagga atgggaagga ggtcctgaag	180
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ggggctgtga acagcagagg tgaattcaca ggcacctaca tcacagccgt aacagccaca 420
tcaaagagtc accactgcat gggacacaaa acaccatcaa caagtccggc 480
ggatccaaag agtcaccact gcatgggaca caaaacacca tcaacaagag gaccagccc 540
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ttcacaggca cctacatcac agccgtaaca taa 873

